

## PAPER CONTAINER

## 2 BACKGROUND OF THE INVENTION

### 3 1. Field of the Invention

4 The present invention relates to a paper container, and more particularly to a  
5 container made of paper and having a central disk-like sheet and an annular sectorial  
6 side face attached to a peripheral edge of the central sheet.

## 7 2. Description of Related Art

8 A conventional paper container (40), as shown in Figs. 6 and 7, is formed on a  
9 paper sheet (30) which has multiple concentric circles. Therefore, by proper pressing,  
10 multiple paper containers (40) are formed. Furthermore, patterns (41) are formed on  
11 side walls of the paper container (40) to increase the paper container strength to resist  
12 deformation.

13           However, after a paper container (40) of this kind is formed, forming the  
14       patterns (41) on the side walls of the paper container (40) increases the manufacture and  
15       labor cost. Besides, because the paper container is made from a single paper sheet (30),  
16       the base ring, which later on is held by a user, has poor heat isolation such that the user  
17       can not hold the paper container if the paper container is filled with a hot content.

18 To overcome the shortcomings, the present invention tends to provide an  
19 improved paper container to mitigate the aforementioned problems.

20 SUMMARY OF THE INVENTION

21. The primary objective of the present invention is to provide an improved paper  
22. container composed of a base disk and an annular peripheral wall with a ledge extending  
23. out from a base ring which has a knurl formed on a joint between the ledge and the side  
24. wall to be engaged with a surface, such that the user is able to hold the paper container

1 by the knurl and a lip ring formed on a free edge of the peripheral side wall.

2 Another objective of the present invention is that before the paper container is  
3 formed, the peripheral wall has a cutout defined in a portion of the peripheral wall so  
4 that when two distal ends of the peripheral wall are connected to one another, a conical  
5 shape is formed for connection with the base disk.

6 Other objects, advantages and novel features of the invention will become more  
7 apparent from the following detailed description when taken in conjunction with the  
8 accompanying drawings.

9 **BRIEF DESCRIPTION OF THE DRAWINGS**

10 Fig. 1 is an exploded perspective view of the paper container of the present  
11 invention;

12 Fig. 2 is a top plan view of the semi-product of the paper container;

13 Fig. 3 is a schematic cross sectional view showing the engagement between the  
14 base disk and the peripheral wall;

15 Fig. 4 is a schematic cross sectional view showing another preferred  
16 embodiment of the paper container of the present invention;

17 Fig. 5 is a top plan view showing that the paper container of the present  
18 invention is able to connect to another paper container easily to save space;

19 Fig. 6 is a top plan view showing the formation of conventional paper containers;  
20 and

21 Fig. 7 is a side plan view showing the shape of the conventional paper container.

22 **DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT**

23 With reference to Fig. 1, a paper container in accordance with the present  
24 invention includes a base disk (10) and a peripheral wall (20).

1           The base disk (10) is a circular disk made of paper.  
2           The peripheral wall (20) has a ledge (25) formed on a bottom edge of the  
3       peripheral wall (20) and extending in a first direction, a lip ring (21) formed on a top  
4       edge of the peripheral wall (20) and extending in a second direction opposite to the first  
5       direction of the ledge (21) and a knurl (23) formed on a joint between the ledge (21) and  
6       the side wall (22) of the peripheral wall (20). A cutout (A) is defined between two distal  
7       ends of the peripheral wall (20).

8           With reference to Figs. 2 and 3, when the base disk (10) and the peripheral wall  
9       (20) are combined, it is noted that the ledge (21) is securely engaged with a bottom face  
10      of the base disk (10) which has a bend (11) formed on a peripheral edge of the base disk  
11      (10) to engage with an inner face of the side wall (22). After the engagement between  
12      the bend (11) and the inner face of the side wall (22), the combination between the base  
13      disk (10) and the peripheral wall (20) is accomplished. As a result of the provision of the  
14      knurl (23) extending out to engage with a surface, an annular space (B) is defined  
15      between the base disk (10) and the peripheral wall (20) and the user is able to hold the  
16      paper container of the present invention without being burned by the heat of the object  
17      received in the paper container. Besides, because the bottom of the paper container is  
18      composed of two paper layers, the heat isolation effect of the paper container of the  
19      present invention is good.

20           With reference to Fig. 4, another embodiment of the present invention is shown  
21      and the base disk (10) has a knurl (11') and a bend (12) formed on a peripheral edge of  
22      the base disk (10). The peripheral wall (20) has a ledge (25) formed on a bottom edge of  
23      the peripheral wall (20) and extending in a first direction and a lip ring (21) formed on a  
24      top edge of the peripheral wall (20) and extending in a second direction opposite to the

1 first direction. When the base disk (10) and the peripheral wall (20) are combined, the  
2 ledge (25) is engaged with an inner face of the base disk (10) and an outer surface of the  
3 side wall (22) is engaged with an inner surface of the bend (12). Thus an annular space  
4 (D) is defined between the base disk (10) and the peripheral wall (20). Therefore, the  
5 user is able to hold the paper container of the present invention by the knurl (11') and the  
6 lip ring (21) without being burned by the heat of the object received in the paper  
7 container.

8 With reference to Fig. 5, it is noted that when multiple paper containers of the  
9 present invention are stored or transported, due to the provision of the cutout (A)  
10 between two distal ends of the peripheral wall (20), two adjacent paper containers are  
11 easily cross-linked and thus space is saved.

12 It is to be understood, however, that even though numerous characteristics and  
13 advantages of the present invention have been set forth in the foregoing description,  
14 together with details of the structure and function of the invention, the disclosure is  
15 illustrative only, and changes may be made in detail, especially in matters of shape, size,  
16 and arrangement of parts within the principles of the invention to the full extent  
17 indicated by the broad general meaning of the terms in which the appended claims are  
18 expressed.